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[93.04] Arcminute Resolution Gamma-ray Images of Cosmic Sources Taken with the Balloon-borne GRATIS Payload

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We present the first arcminute images of the gamma-ray sky. These images were taken with the Gamma Ray Arcminute Telescope and Imaging System (GRATIS). Using a combination of rotated one-dimensional coded aperture masks and a novel state of the art aspect reconstruction system we imaged a number of gamma ray sources, including CenA and GRS 1915 during the Fall 1995 Alice Springs, Australia balloon campaign. We discuss the specifics of the observations and preliminary results. The performance of the aspect system provides a straightforward development path to the production of a system capable of the 1-3 arcsecond localizations required for potential gamma-ray burst detection from either small satellite or long duration balloon platforms.

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